

DETAILED ACTION

Election/Restrictions

1. Claims 7, 9-12 are allowable. The restriction requirement between claims 1-17 and claims 18-25, as set forth in the Office action mailed on 11/30/2011, has been reconsidered in view of the allowability of claims to the elected invention. **The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim.**

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Allowable Subject Matter

2. Claims 7, 9-12 are allowed.

The following is an examiner's statement of reasons for allowance:

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Claims 7 and 11 are allowable over the prior art of record because none of the prior art of record teaches the combined claimed elements as set forth in the claim 7 and 11.

None of the prior art of record teaches or fairly suggests that image processing method for iterative derivation of a master image from a plurality of sampled images of non-identical, at least partially overlapping, regions of a scene, the master image having an output resolution greater than a maximum resolution of the sampled image that employing the correction images to perform a correction to the current master image hypothesis to generate a new master image hypothesis, wherein the back projection includes employing an operator H^{bp} corresponding to a pseudo-inverse of distortion operator H , wherein H^{bp} approximates to an inverse of H at spatial frequencies below a given value and approaches zero at spatial frequencies above the given value, and wherein H^{bp} is chosen to substantially satisfy the condition:

$$H^{bp} \times D^{\dagger} \times D \times H = I$$

Where in I is the unit operator for an image of the output resolution; D is a sampling operator for reducing an image from the output resolution to the resolution of an input image; and D^{\dagger} is an inflation operator for expanding an image from the resolution of the input image to the output resolution, and together with combination of other claimed elements as set forth in the independent claim 7. Therefore, the claim 7 is over the prior art of records.

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None of the prior art of record teaches or fairly suggests that image processing method for iterative derivation of a master image from a plurality of sampled images of non-identical, at least partially overlapping, regions of a scene, the master image having an output resolution greater than a maximum resolution of the sampled image that employing the correction images to perform a correction to the current master image hypothesis to generate a new master image hypothesis, wherein the back projection includes employing an operator H^{bp} corresponding to a pseudo-inverse of distortion operator H , wherein H^{bp} approximates to an inverse of H at spatial frequencies below a given value and approaches zero at spatial frequencies above the given value and wherein the correction to the current master image hypothesis includes combining the correction images by deriving a weighted average of values of corresponding pixels in the correction images, the weight of each pixel in each correction image being calculated as a function of a distance as measured in the sampled image between: (i) a point in the sampled image to which the pixel in the correction image is mapped by the transformation operator; and (ii) at least one pixel centroid proximal to the point, and together with combination of other claimed elements as set forth in the independent claim 11. Therefore, the claim 11 is over the prior art of records.

Claims 9, 10 and 12 are allowed because they are depended on independent claims 7 and 11.

Any comments considered necessary by applicant must be submitted no later than payment of the issue fee and, to avoid processing delay, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reason for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randolph Chu whose telephone number is 571-270-1145. The examiner can normally be reached on Monday to Thursday from 7:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on 571-272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/RANDOLPH I CHU/

Primary Examiner, Art Unit 2624